

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A system for providing information regarding the operation of a control system, comprising:

a Web server module associated with said control system, said Web server module having a memory operative to store a non-markup language Web site database defining a Web site; and

a computer operative to receive non-markup language configuration data defining said Web site, to store said configuration data as said Web site database, and to transmit said Web site database to said Web server module.

2. The system of Claim 1, wherein said Web server module is operative to receive a request for a Web page of said Web site and to dynamically generate a markup language Web page from said Web site database in response to said request.

3. The method of Claim 2, wherein said Web server module is operative to transmit said dynamically generated markup language Web page to a remote computer making said request.

4. The system of Claim 3, wherein said Web site database further comprises a security profile map defining security level and privilege information for one or more users, and wherein said Web server module is further operative to identify a user associated with said request and to determine if said user is authorized to receive said Web page based upon an entry in said security profile map associated with said user.

5. The system of Claim 2, wherein said Web site database further comprises data defining a Web page comprising a table for reading or writing the contents of a memory register contained within said control system.

6. The system of Claim 2, wherein said Web site database further comprises data defining a Web page comprising a non-text rendering of read or write data corresponding to contents of a memory register contained within said control system.

7. The system of Claim 5, wherein said request comprises a request for said Web page comprising a table, and wherein said Web server module is operative to identify said memory register, to determine the contents of said memory register, and to create said Web page comprising a table containing said contents of said memory register.

8. The system of Claim 6, wherein said request comprises a request for said Web page comprising a non-text rendering, and wherein said Web server module is operative to identify said memory register, to determine the contents of said memory register, and to create said Web page comprising a non-text rendering based upon said contents of said memory register.

9. The system of Claim 3, wherein said Web server module is electrically connected to said control system controller through a backplane interface.

10. The system of Claim 3, wherein said Web server module is electrically connected to said control system controller through a serial interface.

11. The system of Claim 3, wherein said Web server module is electrically connected to said control system controller through a network interface.

12. The method of Claim 3, wherein said request comprises a hyper-text transport protocol request and wherein said request is received from a Web browser executing on said remote computer.

13. The method of Claim 12, wherein said dynamically generated markup language Web page comprises a Web page identifying an alarm generated by said Web server module through the monitoring of data for said control system.

14. The method of Claim 12, wherein said dynamically generated markup language Web page comprises a Web page identifying an event generated by said Web server module through the monitoring of data for said control system.

15. The method of Claim 12, wherein said Web server module further comprises an Ethernet interface for receiving said Web site database and said requests and wherein said dynamically generated markup language Web page may comprise a Web page providing information regarding the status of said Ethernet interface.

16. The method of Claim 12, wherein said Web server module further comprises a serial port interface and wherein said dynamically generated markup language Web page may comprise a Web page providing information regarding said serial port interface.

17. The method of Claim 12, wherein said dynamically generated markup language Web page comprises a Web page providing system administrator or specific user-allowed access that allows active browser session modification of said security profile privileges.

18. The method of Claim 12, wherein said Web server module is further operative to receive a plurality of said requests and wherein said dynamically generated markup language Web page may comprise a Web page identifying a like plurality of users connected to said Web server module and associated with said plurality of requests.

19. An apparatus for providing information regarding the operating of a control system, comprising:

a central processing unit;

a memory coupled to said central processing unit operative to store a Web site database defining a Web site associated with said control system, said Web site database in a format that may be utilized by said central processing unit to dynamically render Web pages of said Web site;

a first interface coupled to said central processing unit for communicating with said control system controller and utilized by said central processing unit to retrieve and provide information regarding the operating of and for said control system;

a second interface for communicating with a remote computer also coupled to said central processing unit and utilized by said central processing unit to receive requests for said Web pages and to transmit responses to said requests.

20. The apparatus of Claim 19, wherein said central processing unit is further operative to receive a request via said second interface for a Web page, to dynamically generate said Web page from said Web site database utilizing information obtained from said control system controller via said first interface, and to transmit said Web page in response to said request via said second interface.

21. The apparatus of Claim 20, wherein said first interface comprises a backplane interface.

22. The apparatus of Claim 20, wherein said first interface comprises a serial port interface.

23. The apparatus of Claim 20, wherein said first interface comprises a network interface.

24. The apparatus of Claim 20, further comprising a security profile map defining security privileges for one or more users, and wherein said central processing unit is further operative to identify a user associated with said request and to determine if said user is authorized to receive said Web page based upon entries in said security profile map associated with said user and said Web page.

25. The apparatus of Claim 20, wherein said Web site database further comprises data defining a Web page comprising a table or non-text rendering for reading or writing the contents of a memory register contained within said control system.

26. The apparatus of Claim 25, wherein said request comprises a request for said Web page comprising a table or non-text rendering of data, and wherein said central processing unit is operative to identify said memory register, to determine the contents of said memory register, and to create said Web page comprising a table or non-text rendering corresponding to said contents of said memory register using said Web site database.

27. A method for providing information regarding the operation of a control system, comprising:

receiving non-markup language configuration data defining a Web site; and
storing said configuration data as a non-markup language Web site database.

28. The method of Claim 27, further comprising transmitting said Web site database to a Web server module associated with said control system, wherein said Web server module is operative to receive requests for said Web site and to generate markup language Web pages from said Web site database in response to said requests.

29. The method of Claim 27, wherein said configuration data comprises data defining Web pages comprising a table or non-text rendering corresponding to the contents of read or write memory registers contained within said control system.

30. The method of Claim 29, wherein said data defining said table is created by receiving a mapping of a text tag to said memory register and by receiving a selection of said tags and a request that said tag be displayed in said table.

31. The method of Claim 29, wherein said data defining said non-text rendering is created by receiving a mapping of a tag to said memory register and a request that said tag be displayed via said non-text rendering.

32. The method of Claim 27, wherein said configuration data comprises configuration data for said Web server module.

33. The method of Claim 32, wherein said configuration data for said Web server module comprises an internet protocol address for said Web server module.

34. The method of Claim 27, wherein receiving non-markup language configuration data defining a Web site comprises receiving the selection of one or more of a plurality of defined Web pages.

35. The method of Claim 32, wherein said plurality of defined Web pages comprises a security page, an alarm Web page, an event Web page, an Ethernet Web page, a serial port Web page, a menu Web page, a data access Web page, a page identifying online users, or a systems administrator page.

36. A computer-readable medium comprising instructions which, when executed by a computer, cause the computer to perform the method of any one of Claims 27-35.

37. A computer-controlled apparatus capable of performing the method of any one of Claims 27-35.